

WHAT IS CLAIMED IS:

1. A server apparatus which inputs a print job including an insert mark set in an information processing apparatus and PDL data of documents of which
5 a specified page is previously marked by the insert mark from at least one or more information processing apparatuses connected on a network and transfers print image data to an image processing apparatus for executing predetermined image processing according to a communication performed between a scanner unit and a
10 printer unit, comprising:

development means for sequentially developing the PDL data of each page included in the print job to be input into the print image data;

15 storage means for storing each of the print image data developed by said development means;

judgment means for judging whether or not each page of the print job is an insert page to which image data externally input is inserted, by comparing the
20 insert mark set in the print job with the PDL data of each page in the print job;

creation means for creating job management information, which includes page management information including information of linking the each page of the
25 print job with each of the print image data stored in said storage means and information of indicating whether or not the each page of the print job is the

insert page, and a job ID of specifying the print job,
for each job to be input;

hold means for holding a job management table
including the job management information for each of
5 the jobs;

list transfer means for transferring a job
selection list, which is created with reference to the
job management table on the basis of a job selection
list obtaining request from the image processing
10 apparatus, to the image processing apparatus;

page judgment result transfer means for
transferring a result indicating whether or not a
designated page of a designated print job is the insert
page to the image processing apparatus with reference
15 to the job management table in accordance with inquiries
from the image processing apparatus; and

image transfer means for transferring print image
data, which corresponds to a designated page of a job
designated in an image data obtaining request and is
20 uniquely selected from said storage means with
reference to the job management table on the basis of
the image data obtaining request from the image
processing apparatus, to the image processing
apparatus.

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2. An apparatus according to claim 1, wherein the
print job input from the image processing apparatus

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includes a user ID used in specifying the information processing apparatus, and the job management information includes a user ID corresponding to the print job.

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3. A server apparatus which inputs a print job including an insert mark set in an information processing apparatus and PDL data of documents of which a specified page is previously marked by the insert mark from at least one or more information processing apparatuses connected on a network and transfers print image data to an image processing apparatus for executing predetermined image processing according to a communication performed between a scanner unit and a printer unit, comprising:

development means for sequentially developing the PDL data of each page included in the print job to be input into the print image data;

storage means for storing each of the print image data developed by said development means;

judgment means for judging whether or not each page of the print job is an insert page to which image data externally input is inserted, by comparing the insert mark set in the print job with the PDL data of each page in the print job;

creation means for creating job management information, which includes page management information

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including information of linking the each page of the print job with each of the print image data stored in said storage means and information of indicating whether or not the each page of the print job is the
5 insert page, and a job ID of specifying the print job, for each job to be input;

hold means for holding a job management table including the job management information for each of the jobs;

10 list transfer means for transferring a job selection list, which is created with reference to the job management table on the basis of a job selection list obtaining request from the image processing apparatus, to the image processing apparatus;

15 page judgment result transfer means for transferring a result indicating whether or not a designated page of a designated print job is the insert page to the image processing apparatus with reference to the job management table in accordance with inquiries from the image processing apparatus; and

20 image link means for storing the image data transferred from the image processing apparatus into said storage means and updating the page management information of the corresponded page so as to link the stored image data with the designated page of the
25 designated print job.

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4. An apparatus according to claim 3, wherein the print job input from the image processing apparatus includes a user ID used in specifying the information processing apparatus, and the job management information includes a user ID corresponding to the print job.

5. An image processing apparatus, which executes predetermined image processing according to a communication performed between a scanner unit and a printer unit, capable of communicating with a server apparatus which generates image data by obtaining a print job communicating with at least one or more information processing apparatuses connected on a network and analyzing the obtained print job, comprising:

10 issuance means for issuing a job selection list obtaining request used in selecting print jobs being managed for the server apparatus;

15 selection means for selecting any of the print jobs by displaying a job selection list transferred from the server apparatus in response to the job selection list obtaining request issued by said issuance means; and

20 control means for switching and controlling a print process in which, for each of pages of the selected print job, it is sequentially inquired whether

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or not the pages are insert pages for the server apparatus and an image data obtaining request is issued for the server apparatus in accordance with the inquired result, then print image data transferred from

5 the server apparatus is output using the printer unit and a copying process in which an image input of insert originals is performed in real time by the scanner unit, then image data is output using the printer unit.

10 6. An apparatus according to claim 5, wherein an original feed device for feeding plural insert originals in the order of those originals to the scanner unit is provided,

wherein said control means causes the original
15 feed device to feed the insert originals and performs the image input of the insert originals by the scanner unit.

7. An apparatus according to claim 5, wherein the
20 job selection list is displayed including a job ID corresponding to each of the print jobs.

8. An apparatus according to claim 5, wherein the
job selection list is displayed including a user ID
25 corresponding to each of the print jobs.

9. An image processing apparatus, which executes

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predetermined image processing according to a communication performed between a scanner unit and a printer unit, capable of communicating with a server apparatus which generates image data by obtaining a print job communicating with at least one or more information processing apparatuses connected on a network and analyzing the obtained print job, comprising:

issuance means for issuing a job selection list obtaining request used in selecting print jobs being managed for the server apparatus;

selection means for selecting any of the print jobs by displaying a job selection list transferred from the server apparatus in response to the job selection list obtaining request issued by said issuance means; and

control means for transferring input image data to the server apparatus by executing processing in which, for each of pages of the selected print job, it is sequentially inquired whether or not the pages are insert pages for the server apparatus, and an image input of insert originals is performed by the scanner unit in accordance with the inquired result.

10. An apparatus according to claim 9, wherein an original feed device for feeding plural insert originals in the order of those originals to the

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scanner unit is provided,

wherein said control means causes the original feed device to feed the insert originals and performs the image input of the insert originals by the scanner unit.

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11. An apparatus according to claim 9, wherein the job selection list is displayed including a job ID corresponding to each of the print jobs.

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12. An apparatus according to claim 9, wherein the job selection list is displayed including a user ID corresponding to each of the print jobs.

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13. A control method of a server apparatus which inputs a print job including an insert mark set in an information processing apparatus and PDL data of documents of which a specified page is previously marked by the insert mark from at least one or more information processing apparatuses connected on a network and transfers print image data to an image processing apparatus for executing predetermined image processing according to a communication performed between a scanner unit and a printer unit, said method comprising:

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25 a development step of sequentially developing the PDL data of each page included in the print job to be

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input into the print image data;

a storage step of storing each of the developed print image data into a memory;

a judgment step of judging whether or not each 5 page of the print job is an insert page to which image data externally input is inserted, by comparing the insert mark set in the print job with the PDL data of each page in the print job;

a creation step of creating job management 10 information, which includes page management information including information of linking the each page of the print job with each of the print image data stored in the memory and information of indicating whether or not the each page of the print job is the insert page, and 15 a job ID of specifying the print job, for each job to be input, and creating a job management table including the job management information for each of the jobs;

a list transfer step of transferring a job selection list, which is created with reference to the 20 job management table on the basis of a job selection list obtaining request from the image processing apparatus, to the image processing apparatus;

a page judgment result transfer step of 25 transferring a result indicating whether or not a designated page of a designated print job is the insert page to the image processing apparatus with reference to the job management table in accordance with inquiries

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from the image processing apparatus; and
an image transfer step of transferring print image
data, which corresponds to a designated page of a job
designated in an image data obtaining request and is
5 uniquely selected from the memory with reference to the
job management table on the basis of the image data
obtaining request from the image processing apparatus,
to the image processing apparatus.

10 14. A control method of a server apparatus which
inputs a print job including an insert mark set in an
information processing apparatus and PDL data of
documents of which a specified page is previously
marked by the insert mark from at least one or more
15 information processing apparatuses connected on a
network and transfers print image data to an image
processing apparatus for executing predetermined image
processing according to a communication performed
between a scanner unit and a printer unit, said method
comprising:
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 a development step of sequentially developing the
PDL data of each page included in the print job to be
input into the print image data;

25 a storage step of storing each of the developed
print image data into a memory;

 a judgment step of judging whether or not each
page of the print job is an insert page to which image

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data externally input is inserted, by comparing the insert mark set in the print job with the PDL data of each page in the print job;

- a creation step of creating job management information, which includes page management information including information of linking the each page of the print job with each of the print image data stored in the memory and information of indicating whether or not the each page of the print job is the insert page, and a job ID of specifying the print job, for each job to be input, and creating a job management table including the job management information for each of the jobs;
- a list transfer step of transferring a job selection list, which is created with reference to the job management table on the basis of a job selection list obtaining request from the image processing apparatus, to the image processing apparatus;
- a page judgment result transfer step of transferring a result indicating whether or not a designated page of a designated print job is the insert page to the image processing apparatus with reference to the job management table in accordance with inquiries from the image processing apparatus; and
- an image link step of storing the image data transferred from the image processing apparatus into the memory and updating the page management information of the corresponded page so as to link the stored image

data with the designated page of the designated print job.

15. A control method of an image processing apparatus, which executes predetermined image processing according to a communication performed between a scanner unit and a printer unit, capable of communicating with a server apparatus which generates image data by obtaining a print job communicating with at least one or more information processing apparatuses connected on a network and analyzing the obtained print job, said method comprising:

10 an issuance step of issuing a job selection list obtaining request used in selecting print jobs being managed for the server apparatus;

15 a selection step of selecting any of the print jobs by displaying a job selection list transferred from the server apparatus in response to the job selection list obtaining request; and

20 a switching step of switching a print process in which, for each of pages of the selected print job, it is sequentially inquired whether or not the pages are insert pages for the server apparatus and an image data obtaining request is issued for the server apparatus in accordance with the inquired result, then print image data transferred from the server apparatus is output using the printer unit and a copying process in which

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an image input of insert originals is performed in real time by the scanner unit, then image data is output using the printer unit.

5 16. A control method of an image processing apparatus, which executes predetermined image processing according to a communication performed between a scanner unit and a printer unit, capable of communicating with a server apparatus which generates
10 image data by obtaining a print job communicating with at least one or more information processing apparatuses connected on a network and analyzing the obtained print job, said method comprising:
15 an issuance step of issuing a job selection list
16 obtaining request used in selecting print jobs being managed for the server apparatus;
17 a selection step of selecting any of the print jobs by displaying a job selection list transferred from the server apparatus in response to the job
20 selection list obtaining request; and
21 a transfer step of transferring input image data to the server apparatus by executing processing in which, for each of pages of the selected print job, it is sequentially inquired whether or not the pages are
22 insert pages for the server apparatus, and an image input of insert originals is performed by the scanner unit in accordance with the inquired result.

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17. A computer-readable storage medium which stores programs used for executing steps in a control method of a server apparatus which inputs a print job including an insert mark set in an information

5 processing apparatus and PDL data of documents of which a specified page is previously marked by the insert mark from at least one or more information processing apparatuses connected on a network and transfers print image data to an image processing apparatus for

10 executing predetermined image processing according to a communication performed between a scanner unit and a printer unit, comprising:

15 a development step of sequentially developing the PDL data of each page included in the print job to be input into the print image data;

20 a storage step of storing each of the developed print image data into a memory;

25 a judgment step of judging whether or not each page of the print job is an insert page to which image data externally input is inserted, by comparing the insert mark set in the print job with the PDL data of each page in the print job;

30 a creation step of creating job management information, which includes page management information including information of linking the each page of the print job with each of the print image data stored in the memory and information of indicating whether or not

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the each page of the print job is the insert page, and a job ID of specifying the print job, for each job to be input, and creating a job management table including the job management information for each of the jobs;

5 a list transfer step of transferring a job selection list, which is created with reference to the job management table on the basis of a job selection list obtaining request from the image processing apparatus, to the image processing apparatus;

10 a page judgment result transfer step of transferring a result indicating whether or not a designated page of a designated print job is the insert page to the image processing apparatus with reference to the job management table in accordance with inquiries 15 from the image processing apparatus; and

an image transfer step of transferring print image data, which corresponds to a designated page of a job designated in an image data obtaining request and is uniquely selected from the memory with reference to the 20 job management table on the basis of the image data obtaining request from the image processing apparatus, to the image processing apparatus.

18. A computer-readable storage medium which stores programs used for executing steps in a control method of a server apparatus which inputs a print job including an insert mark set in an information

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processing apparatus and PDL data of documents of which a specified page is previously marked by the insert mark from at least one or more information processing apparatuses connected on a network and transfers print

5 image data to an image processing apparatus for executing predetermined image processing according to a communication performed between a scanner unit and a printer unit, comprising:

 a development step of sequentially developing the

10 PDL data of each page included in the print job to be input into the print image data;

 a storage step of storing each of the developed print image data into a memory;

 a judgment step of judging whether or not each

15 page of the print job is an insert page to which image data externally input is inserted, by comparing the insert mark set in the print job with the PDL data of each page in the print job;

 a creation step of creating job management

20 information, which includes page management information including information of linking the each page of the print job with each of the print image data stored in the memory and information of indicating whether or not the each page of the print job is the insert page, and

25 a job ID of specifying the print job, for each job to be input, and creating a job management table including the job management information for each of the jobs;

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a list transfer step of transferring a job selection list, which is created with reference to the job management table on the basis of a job selection list obtaining request from the image processing apparatus, to the image processing apparatus;

5 a page judgment result transfer step of transferring a result indicating whether or not a designated page of a designated print job is the insert page to the image processing apparatus with reference 10 to the job management table in accordance with inquiries from the image processing apparatus; and

15 an image link step of storing the image data transferred from the image processing apparatus into the memory and updating the page management information of the corresponded page so as to link the stored image data with the designated page of the designated print job.

19. A computer-readable storage medium which 20 stores programs used for executing steps in a control method of an image processing apparatus, which executes predetermined image processing according to a communication performed between a scanner unit and a printer unit, capable of communicating with a server 25 apparatus which generates image data by obtaining a print job communicating with at least one or more information processing apparatuses connected on a

network and analyzing the obtained print job,
comprising:

an issuance step of issuing a job selection list
obtaining request used in selecting print jobs being
5 managed for the server apparatus;

a selection step of selecting any of the print
jobs by displaying a job selection list transferred
from the server apparatus in response to the job
selection list obtaining request; and

10 a switching step of switching a print process in
which, for each of pages of the selected print job, it
is sequentially inquired whether or not the pages are
insert pages for the server apparatus and an image data
obtaining request is issued for the server apparatus in
15 accordance with the inquired result, then print image
data transferred from the server apparatus is output
using the printer unit and a copying process in which
an image input of insert originals is performed in real
time by the scanner unit, then image data is output
20 using the printer unit.

20. A computer-readable storage medium which
stores programs used for executing steps in a control
method of an image processing apparatus, which executes
25 predetermined image processing according to a
communication performed between a scanner unit and a
printer unit, capable of communicating with a server

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apparatus which generates image data by obtaining a print job communicating with at least one or more information processing apparatuses connected on a network and analyzing the obtained print job,

5 comprising:

an issuance step of issuing a job selection list obtaining request used in selecting print jobs being managed for the server apparatus;

10 a selection step of selecting any of the print jobs by displaying a job selection list transferred from the server apparatus in response to the job selection list obtaining request; and

15 a transfer step of transferring input image data to the server apparatus by executing processing in which, for each of pages of the selected print job, it is sequentially inquired whether or not the pages are insert pages for the server apparatus, and an image input of insert originals is performed by the scanner unit in accordance with the inquired result.

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21. An image processing apparatus comprising:

input means for inputting data of a series of originals consisting of plural pages sent from an information processing apparatus;

25 control means for causing an image formation apparatus which forms images on sheets to print input originals data; and

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judgment means for judging whether or not a page,
to which information indicating an instruction for the
image formation apparatus is added, exists in the input
data of a series of originals sent from the information
processing apparatus with a page unit,

5 wherein said control means sets pages other than
the page, to which the information indicating the
instruction for the image formation apparatus is added,
included in the data of a series of the originals, in a
10 state that a printing operation can be performed by the
image formation apparatus on the basis of a judgment
result obtained by said judgment means and causes the
image formation apparatus to execute processing based
on the instruction in accordance with a fact that the
15 page judged by said judgment means is the page to which
the information indicating the instruction for the
image formation apparatus is added.

22. An apparatus according to claim 21, wherein
20 said control means causes the image formation apparatus
not to print the page to which the information
indicating the instruction for the image formation
apparatus is added.

25 23. An apparatus according to claim 22, wherein
said control means executes processing aimed for
generating data, of which state is that the instruction

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added page in the original data input from the information processing apparatus is exchanged to a page of the original data from the scanner unit, as one document.

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24. An apparatus according to claim 23, wherein said control means prints data obtained by performing an exchange between the instruction added page in the original data input from the information processing apparatus and the page of the original data from the scanner unit as one document.

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15 25. An apparatus according to claim 23, wherein said control means stores data obtained by performing an exchange between the instruction added page in the original data input from the information processing apparatus and the page of the original data from the scanner unit into storage means as one document.

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25 26. An apparatus according to claim 22, wherein the image formation apparatus has storage means for previously storing sheets on which images were formed, and said control means causes the image formation apparatus to print the pages other than the page, to which the information indicating the instruction for the image formation apparatus is added, included in the data of a series of the originals and the sheets on

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which images were formed are previously fed from said storage means in accordance with a fact that the page judged by said judgment means is the page to which the information indicating the instruction for the image

5 formation apparatus is added, then processing for inserting the fed sheet among sheets, on which images of the pages other than the page to which the information indicating the instruction is added are formed, is executed on the basis of the instruction.

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27. An image processing method comprising:
an input step of inputting data of a series of originals consisting of plural pages sent from an information processing apparatus;

15 a control step of causing an image formation apparatus which forms images on sheets to print input original data; and

20 a judgment step of judging whether or not a page, to which information indicating an instruction for the image formation apparatus is added, exists in the input data of a series of originals sent from the information processing apparatus with a page unit,

25 wherein said control step sets pages other than the page, to which the information indicating the instruction for the image formation apparatus is added, included in the data of a series of the originals, in a state that a printing operation can be performed by the

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image formation apparatus on the basis of a judgment result obtained in said judgment step and causes the image formation apparatus to execute processing based on the instruction in accordance with a fact that the
5 page judged in said judgment step is the page to which the information indicating the instruction for the image formation apparatus is added.

28. A computer-readable storage medium which
10 stores programs used for causing an image processing apparatus capable of inputting data of a series of originals consisting of plural pages sent from an information processing apparatus to execute the following steps, comprising:

15 an input step of inputting data of a series of originals consisting of plural pages sent from the information processing apparatus;

a control step of causing an image formation apparatus which forms images on sheets to print input
20 originals data; and

25 a judgment step of judging whether or not a page, to which information indicating an instruction for the image formation apparatus is added, exists in the input data of a series of originals sent from the information processing apparatus with a page unit,

wherein said control step sets pages other than the page, to which the information indicating the

instruction for the image formation apparatus is added, included in the data of a series of the originals, in a state that a printing operation can be performed by the image formation apparatus on the basis of a judgment
5 result obtained in said judgment step and causes the image formation apparatus to execute processing based on the instruction in accordance with a fact that the page judged in said judgment step is the page to which the information indicating the instruction for the
10 image formation apparatus is added.

29. An information processing apparatus capable of outputting data of a series of originals consisting of plural pages to an image formation apparatus for
15 forming images on sheets characterized in that the data of a series of the originals is output to the image formation apparatus in a state that a page, to which information indicating an instruction for the image formation apparatus is added, is included together with
20 pages used for forming images by the image formation apparatus in the data of a series of originals to be output to the image formation apparatus.

30. An information control method of an
25 information processing apparatus capable of outputting data of a series of originals consisting of plural pages to an image formation apparatus for forming

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images on sheets characterized in that the data of a series of the originals is output to the image formation apparatus in a state that a page, to which information indicating an instruction for the image formation apparatus is added, is included together with pages used for forming images by the image formation apparatus in the data of a series of originals to be output to the image formation apparatus.

10 31. A computer-readable storage medium which stores programs used for causing an information processing apparatus capable of outputting data of a series of originals consisting of plural pages to an image formation apparatus for forming images on sheets

15 to execute a step of outputting the data of a series of the originals to the image formation apparatus in a state that a page, to which information indicating an instruction for the image formation apparatus is added, is included together with pages used for forming images

20 by the image formation apparatus in the data of a series of originals to be output to the image formation apparatus.

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